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EXAMINER				
TESHALE, AKELAW				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/537,043

Applicant(s)

LIAN ET AL.

Examiner

AKELAW A. TESHAE

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2010.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 01 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is response to communication filed on **09/24/2010**.
2. Claims **1-20** are pending in this action.
3. This Action is Non-Final.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-10,12-15 and 17-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No. 6,950,441 B1 to Kaczmarczyk et al. in view of U.S Patent No. 6,363,424 B1 to Douglas et al.

Regarding **claim 1**, Kaczmarczyk et al. teach a Softswitch device for a Next Generation Network, characterized in that said Softswitch device implements an intelligent network service in the Next Generation Network (see Fig.4 element 100), and said Softswitch device includes:

a network adaptive device located at a bottom layer of the Softswitch device (Fig.4 elements 138 and 140), the network adaptive device for implementing communication between the Softswitch device and other devices in said Next

Generation Network, as well as receiving call requests (Fig.4 and column 5, line 45 through column 6, line 66; call agent 140 and Signaling agent 138 of Fig.4 receiving call requests. The role of signaling agent 138 is to receive any type of access protocol, communicate with call agent 140, and to terminate the call to the appropriate network using the applicable protocol as instructed by call agent 140);

a call server in a higher layer of the network adaptive device, the call server for determining whether the call received by said network adaptive device is a common call or a call of the intelligent network and processing the common call (Fig.4 element 144 and column 7, lines 37-65; Network directory server 144 is responsible for managing call and handles scripts by accepting, acting, and distribution to correct destinations).

However, Kaczmarczyk et al. do not explicitly teach an Intelligent Network Application Part (INAP) and the adapter for responding to the call of the intelligent network and encoding or decoding an INAP message.

In the same field of endeavor, Douglas et al. teach an Intelligent Network Application Part (INAP) and the adapter for responding to the call of the intelligent network and encoding or decoding an INAP message (column 2, lines 13-28, column 4, lines 5-67 and column 5, lines 25-44; INAP query is formatted by the soft SSP and routed to the SCP for processing. In other word, the INAP adapter for responding to the call of the intelligent network and encoding an INAP message).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Kaczmarczyk et al. teaching with an Intelligent Network Application Part (INAP) and the adapter for responding to the call of the intelligent network and

encoding or decoding an INAP message as taught by Douglas et al. in order to use signaling protocol in Intelligent Networking.

Regarding **claim 2**, Kaczmarczyk et al. teach The Softswitch device according to claim 1, characterized in that said Softswitch device further includes: a resource manager for managing intelligent peripherals, performing audio interaction with a user through the call server, and transmitting the user input data to said adapter (see Fig.4 element 142 and column 7, lines 26-36; "resource manager").

Regarding **claim 3**, Kaczmarczyk et al. teach the Softswitch device according to claim 1, characterized in that said Softswitch device further includes:

a signaling transmitting adapter for transferring signaling data through IP packets (see Fig.4 element 138); and

a media gateway control adapter for transmitting data between said Softswitch device and one or more media gateways in said network (see Fig.4 element 146).

Regarding **claim 4**, Kaczmarczyk et al. teach the Softswitch device according to claim 3, characterized in that the media gateway control adapter uses one or more of the following protocols: H.323, MGCP, H.248 and SIP (column 8, lines 15-32).

Regarding **claim 5**, Kaczmarczyk et al. do not explicitly teach the Softswitch device according to claim 1, characterized in that said network adaptive device includes:

an INAP/TCP interface for directly transmitting an expanded INAP encoded message through TCP/IP protocol.

In the same field of endeavor, Douglas et al. teach network adaptive device includes: an INAP/TCP interface for directly transmitting an expanded INAP encoded message through TCP/IP protocol (column 2, lines 13-28, column 4, lines 5-67 and column 5, lines 25-44; INAP query is formatted by the soft SSP and routed to the SCP for processing. In other word, the INAP adapter for responding to the call of the intelligent network and encoding an INAP message).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Kaczmarczyk et al. teaching with network adaptive device includes: an INAP/TCP interface for directly transmitting an expanded INAP encoded message through TCP/IP protocol as taught by Douglas et al. in order to use signaling protocol in Intelligent Networking.

Regarding **claim 6**, Kaczmarczyk et al. teach a system for implementing an intelligent network, the system including a Softswitch device and an IP network, the Softswitch device including a network adaptive and a call server (see Fig.4), wherein, the network adaptive device is located at a bottom layer of the Softswitch device, the network adaptive device is for implementing communication between the Softswitch device and other devices in said network, as well as receiving the call request (Fig.4 and column 5, line 45 through column 6, line 66; call agent 140 and Signaling agent 138 of Fig.4 receiving call requests. The role of signaling agent 138 is to receive any type of

access protocol, communicate with call agent 140, and to terminate the call to the appropriate network using the applicable protocol as instructed by call agent 140);

the call server is in a higher layer of the network adaptive device, the call server is for determining whether a call received by said network adaptive device is a common call or a call of the intelligent network and processing the common call (Fig.4 element 144 and column 7, lines 37-65; Network directory server 144 is responsible for managing call and handles scripts by accepting, acting, and distribution to correct destinations); and the IP network is for connecting said Softswitch device (see Fig.1 element 100 and element 110).

However, Kaczmarczyk et al. do not explicitly teach an Intelligent Network Application Part (INAP) and the adapter for responding to the call of the intelligent network and encoding or decoding an INAP message.

In the same field of endeavor, Douglas et al. teach the INAP adapter is in a higher layer of the call server, the INAP adapter is for responding to the call of the intelligent network and encoding or decoding the INAP message; the at least one SCP is for executing intelligent service logic and producing INAP messages; and the IP network is for connecting said Softswitch device and the SCP (column 2, lines 13-28, column 4, lines 5-67 and column 5, lines 25-44; INAP query is formatted by the soft SSP and routed to the SCP for processing. In other word, the INAP adapter for responding to the call of the intelligent network and encoding an INAP message).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Kaczmarczyk et al. teaching with the INAP adapter is in a higher

layer of the call server, the INAP adapter is for responding to the call of the intelligent network and encoding or decoding the INAP message; the at least one SCP is for executing intelligent service logic and producing INAP messages; and the IP network is for connecting said Softswitch device and the SCP as taught by Douglas et al. in order to use signaling protocol in Intelligent Networking.

Regarding **claim 7**, Kaczmarczyk et al. teach the system according to claim 6, characterized in that said system further includes: intelligent peripherals for providing special resources required by the intelligent network services; and said Softswitch device further includes: a resource manager for managing said intelligent peripherals, performing audio interaction with a user through the call server (see Fig.4 element 142 and 144).

However, Kaczmarczyk et al. do not explicitly teach transmitting the user input data to INAP adapter.

In the same field of endeavor, Douglas et al. teach transmitting the user input data to INAP adapter (column 2, lines 13-28, column 4, lines 5-67 and column 5, lines 25-44; INAP query is formatted by the soft SSP and routed to the SCP for processing. In other word, the INAP adapter for responding to the call of the intelligent network and encoding an INAP message).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Kaczmarczyk et al. teaching with transmitting the user input data to

INAP adapter as taught by Douglas et al. in order to use signaling protocol in Intelligent Networking.

Regarding **claim 8**, Kaczmarczyk et al. teach the system according to claim 6, characterized in that said system further includes:

a signaling gateway, connecting to said IP network at its one side and to a Public Switched Telephone Network (PSTN) at another side, for transferring signaling data between said IP network and said PSTN (Fig.4 and element 130);

a media gateway, connecting to said IP network at its one side and to a PSTN at another side, for transferring media data between said IP network and said PSTN (Fig.4 element 146);

said Softswitch device further including:

a signaling transmitting adapter for transferring signaling data through IP packets (Fig.4 element 138); and

a media gateway control adapter for transmitting data between said Softswitch device and one or more media gateways in said network (Fig.4 element 146).

Regarding **claim 9**, Kaczmarczyk et al. teach a method for a PSTN telephone to access into an intelligent network service in a next generation network (see Fig.4) , said method including:

issuing a call request from said PSTN telephone through dialing an accessing code (column 3, lines 46-56 and column 5, lines 45-67);

a network adaptive device in a Softswitch device transforming said call request issued by said PSTN telephone into a protocol format suitable for the next generation network (Fig.4 and column 5, line 45 through column 6, line 66; call agent 140 and Signaling agent 138 of Fig.4 receiving call requests. The role of signaling agent 138 is to receive any type of access protocol, communicate with call agent 140, and to terminate the call to the appropriate network using the applicable protocol as instructed by call agent 140);

a call server in the Softswitch device determining whether said call request is an intelligent network service provided (Fig.4 element 144 and column 7, lines 37-65; Network directory server 144 is responsible for managing call and handles scripts by accepting, acting, and distribution to correct destinations).

However, Kaczmarczyk et al. do not explicitly teach determining if said call request is an intelligent network service provided by the SCP, an Intelligent Network Application Part (INAP) adapter in the Softswitch device encoding said call request into an INAP message and transferring the message to said SCP; and responding to said INAP message and processing said call request by said SCP.

In the same field of endeavor, Douglas et al. teach determining if said call request is an intelligent network service provided by the SCP, an Intelligent Network Application Part (INAP) adapter in the Softswitch device encoding said call request into an INAP message and transferring the message to said SCP; and responding to said INAP message and processing said call request by said SCP (column 2, lines 13-28, column 4, lines 5-67 and column 5, lines 25-44; INAP query is formatted by the soft

SSP and routed to the SCP for processing. In other word, the INAP adapter for responding to the call of the intelligent network and encoding an INAP message).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Kaczmarczyk et al. teaching with determining if said call request is an intelligent network service provided by the SCP, an Intelligent Network Application Part (INAP) adapter in the Softswitch device encoding said call request into an INAP message and transferring the message to said SCP; and responding to said INAP message and processing said call request by said SCP as taught by Douglas et al. in order to use signaling protocol in Intelligent Networking.

Regarding **claim 10**, Kaczmarczyk et al. teach the method according to claim 9, characterized in that said step for transforming the call request includes: transforming the call request in SS7 signaling format into a format suitable for transmitting on the IP network (column 6, lines 25-66).

Regarding **claim 12**, Kaczmarczyk et al. teach the method according to claim 9, characterized in that said step for determining includes: searching a database that stores the accessing codes of the intelligent network, determining whether the accessing code of the call request of said PSTN telephone is an accessing code of the intelligent network (column 6, lines 11-66).

Regarding **claim 13**, Kaczmarczyk et al. teach a method for a telephone in a next generation network to access into an intelligent network service in a PSTN network (see Fig.4), wherein there is at least one SCP in said PSTN network for executing intelligent service logic, said method including:

issuing a call request from said telephone in said next generation network through dialing an accessing code (column 3, lines 46-56 and column 5, lines 45-67);
a network adaptive device in a Softswitch device determining whether said call request is an intelligent network service provided Fig.4 and column 5, line 45 through column 6, line 66).

However, Kaczmarczyk et al. do not explicitly teach providing said call request is an intelligent network service provided by the SCP, a call server in the Softswitch device encoding said call request into an INAP message; an Intelligent Network Application Part (INAP) in the Softswitch device transforming said INAP message into a format suitable for the PSTN network and transferring said INAP message to said SCP; and responding to said INAP message and processing said call request by said SCP.

In the same field of endeavor, Douglas et al. teach providing said call request is an intelligent network service provided by the SCP, a call server in the Softswitch device encoding said call request into an INAP message; an Intelligent Network Application Part (INAP) in the Softswitch device transforming said INAP message into a format suitable for the PSTN network and transferring said INAP message to said SCP; and responding to said INAP message and processing said call request by said SCP (column 2, lines 13-28, column 4, lines 5-67 and column 5, lines 25-44; INAP query is

formatted by the soft SSP and routed to the SCP for processing. In other word, the INAP adapter for responding to the call of the intelligent network and encoding an INAP message).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Kaczmarczyk et al. teaching with providing said call request is an intelligent network service provided by the SCP, a call server in the Softswitch device encoding said call request into an INAP message; an Intelligent Network Application Part (INAP) in the Softswitch device transforming said INAP message into a format suitable for the PSTN network and transferring said INAP message to said SCP; and responding to said INAP message and processing said call request by said SCP as taught by Douglas et al. in order to use signaling protocol in Intelligent Networking.

Regarding **claim 14**, Kaczmarczyk et al. teach the method according to claim 13, characterized in that said step for determining includes: searching a database that stores the accessing codes of the intelligent network, determining whether the accessing code of the call request of said telephone is an accessing code of the intelligent network (Fig.4 and column 5, line 45 through column 6, line 53).

Regarding **claim 15**, Kaczmarczyk et al. do not explicitly teach the method according to claim 13, characterized in that said step for transforming includes: transforming the INAP message data in IP network format into a format suitable for the PSTN network.

In the same field of endeavor, Douglas et al. teach transforming the INAP message data in IP network format into a format suitable for the PSTN network (column 2, lines 13-28, column 4, lines 5-67 and column 5, lines 25-44).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Kaczmarczyk et al. teaching with transforming the INAP message data in IP network format into a format suitable for the PSTN network as taught by Douglas et al. in order to use signaling protocol in Intelligent Networking.

Regarding **claim 17**, Kaczmarczyk et al. teach a method for a telephone in a next generation network to access into an intelligent network service in a PSTN network (see Fig.4), said method including:

issuing a call request from said telephone in the next generation network through dialing an accessing code (column 3, lines 46-56 and column 5, lines 45-67);

a network adaptive device in a Softswitch device transforming said call request into a format suitable for the PSTN network and transferring it to the PSTN network (Fig.4 and column 5, line 45 through column 6, line 66; call agent 140 and Signaling agent 138 of Fig.4 receiving call requests. The role of signaling agent 138 is to receive any type of access protocol, communicate with call agent 140, and to terminate the call to the appropriate network using the applicable protocol as instructed by call agent 140);

a call server in the Softswitch device determining whether said call request is an intelligent network service provided (Fig.4 element 144 and column 7, lines 37-65);

However, Kaczmarczyk et al. do not explicitly teach determining if said call request is an intelligent network service provided by the SCP, an Intelligent Network Application Part (INAP) in the Softswitch device encoding said call request into an INAP message and transferring said INAP message to said SCP; and responding said INAP message and processing said call request by said SCP.

In the same field of endeavor, Douglas et al. teach determining if said call request is an intelligent network service provided by the SCP, an Intelligent Network Application Part (INAP) in the Softswitch device encoding said call request into an INAP message and transferring said INAP message to said SCP; and responding said INAP message and processing said call request by said SCP(column 2, lines 13-28, column 4, lines 5-67 and column 5, lines 25-44; INAP query is formatted by the soft SSP and routed to the SCP for processing. In other word, the INAP adapter for responding to the call of the intelligent network and encoding an INAP message).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Kaczmarczyk et al. teaching with determining if said call request is an intelligent network service provided by the SCP, an Intelligent Network Application Part (INAP) in the Softswitch device encoding said call request into an INAP message and transferring said INAP message to said SCP; and responding said INAP message and processing said call request by said SCP as taught by Douglas et al. in order to use signaling protocol in Intelligent Networking.

Regarding **claim 18**, Kaczmarczyk et al. teach the method according to claim 17, characterized in that said step for determining includes: searching a database that stores the accessing codes of the intelligent network, determining whether the accessing code of the call request of said telephone is an accessing code of the intelligent network (column 6, lines 11-66).

Regarding **claim 19**, Kaczmarczyk et al. teach the method according to claim 17, characterized in that said step for transforming includes: transforming the call request in IP network format into a format suitable for the PSTN network (column 5, line 45 through column 6, line 67).

6. **Claims 11, 16 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No. 6,950,441 B1 to Kaczmarczyk et al. in view of U.S Patent No. 6,363,424 B1 to Douglas et al. in further view of U.S Patent No 7,103,644 B1 to Zhang et al.

Regarding **claim 11**, Kaczmarczyk et al. do not teach the method according to claim 10, characterized in that said step for transforming the call request includes: transforming the call request in SS7 signaling format into the SIGTRAN protocol format or H.248 protocol format.

In the same field of endeavor, Zhang et al. teach transforming the call request in SS7 signaling format into the SIGTRAN protocol format (see column 3, lines 3-33).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to further modify Kaczmarczyk et al. teaching after being modify by Douglas et al. as suggested in the above rejection to include the feature of transforming the call request in SS7 signaling format into the SIGTRAN protocol format as taught by Zhang et al. in order to support the same application and call management of SS7.

Regarding **claim 16**, Kaczmarczyk et al. do not teach the method according to claim 13, characterized in that said step for transforming includes: transforming the INAP message data in the SIGTRAN protocol format or H.248 protocol format into the SS7 signaling format.

In the same field of endeavor, Zhang et al. teach transforming the INAP message data in the SIGTRAN protocol format or H.248 protocol format into the SS7 signaling format (see column 3, lines 3-33).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to further modify Kaczmarczyk et al. teaching after being modify by Douglas et al. as suggested in the above rejection to include the feature of transforming the INAP message data in the SIGTRAN protocol format or H.248 protocol format into the SS7 signaling format as taught by Zhang et al. in order to support the same application and call management of SS7.

Regarding **claim 20**, Kaczmarczyk et al. do not teach the method according to claim 19, characterized in that said step for transforming includes: transforming the call

request in the SIGTRAN protocol format or H.248 protocol format into the SS7 signaling format.

In the same field of endeavor, Zhang et al. teach transforming the call request in the SIGTRAN protocol format or H.248 protocol format into the SS7 signaling format (see column 3, lines 3-33).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to further modify Kaczmarczyk et al. teaching after being modify by Douglas et al. as suggested in the above rejection to include the feature of transforming the call request in the SIGTRAN protocol format or H.248 protocol format into the SS7 signaling format as taught by Zhang et al. in order to support the same application and call management of SS7.

Response to Arguments

7. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S Patent No. 6,614,781 B1 to Elliott et al. teach SCP communicate with soft switch through INAP (column 42, lines 56-64).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AKELAW A. TESHLE whose telephone number is (571)270-5302. The examiner can normally be reached on M-F 8:00am-5:00 Pm ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, FAN TSANG can be reached on (571)272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Akela A Teshle/
Examiner, Art Unit 2614

/Simon Sing/
Primary Examiner, Art Unit 2614